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| Age phase | Year Group | SOS  Topic name | SOS  Units | Main EYFS / National Curriculum Focus | Working Scientifically |
| EYFS | Reception | Understanding the World | Sample units   * Biscuit Bears * Superheroes | **The Natural World ELG**  Explore the natural world around them, making observations and drawing pictures of animals and plants  Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class  Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. | * asking simple questions * observing closely, using simple equipment * performing simple tests * identifying and classifying * using their observations and ideas to suggest answers to questions |
| Key Stage 1 | Year 1 | Plants and Animals Where We Live | * Our local area * Birds and animals | **Habitats** (Y2)  Identify and name trees, plants and animals in the local environment | * asking simple questions * observing closely, using simple equipment * performing simple tests * identifying and classifying * using their observations and ideas to suggest answers to questions * gathering and recording data to help in answering questions *(Year 2 only)* |
| Who am I? | * My body * My senses | **Animals including humans**  Parts of the human body and senses |
| Celebrations | * Our celebrations: * Light * Music * Food | **Animals including humans**  Materials, plants and light |
| Polar Places | * The expedition * Polar animals * Food | **Animals including humans**  Properties of everyday materials  Polar regions |
| On Safari | * Minibeasts, bugs or invertebrates? * Comparing ourselves and invertebrates | **Animals including humans -** everyday materials  Invertebrates and other plants and animals in the local area |
| Holiday | * Get packed * By the seaside * Protect the environment | **Animals including humans -** everyday materials  Animals they might encounter at the seaside  Human impact on the environment |
| *Seasonal change* | * *Ongoing throughout the year* | ***Seasonal Changes***  *Observe weather and changes across seasons* |
| Year 2 | Healthy Me | * Body and mind * Healthy choices * Coughs and sneezes | **Animals including humans**  Importance of exercise, diet and good hygiene |
| Material Monsters | * Meet the material monsters * Working with materials | **Uses of everyday materials**  Suitability of materials for different uses |
| Squash, bend, twist and stretch | * Squash, squeeze, bend and twist | **Uses of everyday materials**  How the shape of solid objects can change |
| Our local environment | * Living things * Habitats * Food chains | **Living things and their habitats, Plants**  Differences between living and dead, different habitats and their suitability  Simple food chains |
| Young gardeners | * Young gardeners | **Plants**  Seed/bulb grow into plants  What plants need to grow |
| Little Masterchefs | * Becoming a masterchef * Let’s get cooking | **Animals, including humans**  Basic needs for survival.  Importance of exercise and food hygiene. |
| Lower Key Stage 2 | Year 3 | Rocks, soils and fossils | * Rocks * Soils * Fossils | **Rocks**  Group different rocks, how they are formed  The rock family, soils and fossils | * asking relevant questions * setting up simple practical enquiries, comparative and fair tests * making accurate measurements using standard units, using a range of equipment, for example thermometers and data loggers * gathering, recording, classifying and presenting data in a variety of ways to help in answering questions * recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables * reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions * using results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests * identifying differences, similarities or changes related to simple scientific ideas and processes * using straightforward scientific evidence to answer questions or to support their findings |
| Food and our bodies | * Food for thought * Bones and skeletons * Protecting our bones * Muscles and joints | **Animals, including humans**  Need for right amount of nutrition, where it comes from and why it is important  Skeletons and muscles |
| Light and shadows | * Light and reflections * Making shadows | **Light**  Need for light to see  Light is reflected  How shadows are formed - size |
| How does your garden grow? | * Plant parts * Let’s get growing * Flower power | **Plants**  Function of the parts of a plant - including how water is transported  Life cycle of plants |
| Forces and magnets | * Forces and magnetism * Using magnets | **Forces and magnets**  Compare different surfaces.  Magnets- describe forces and poles |
| Science in action – The nappy challenge | * Test centre * Environmental effects | **Working scientifically**  Observe, gather, record, classify and present data |
| Year 4 | What’s the sound? | * How are sounds made? * Sound travelling | **Sound**  How sound is made, travels.  Pitch and volume |
| Living things | * Classifying and identifying * What’s living in our school grounds * Saving bees | **Living things and their habitats**  Group living things, use classification keys.  Change in environment can threaten life |
| Looking at states | * What’s the matter? * Food changing state * The water cycle | **States of matter**  Solids, Liquids, gases  Change state  Evaporation/condensation |
| Teeth and eating | * Tremendous teeth * The digestive system * Producers, predators and prey | **Animals, including humans**  Basic function of digestive system  Teeth  Food chains |
| Power it up | * Living with electricity * Let’s make circuits * Conducting investigations | **Electricity**  Simple circuits  Switches  Conductors and insulators |
| The big build | * Bridges * Building towers * Animal big builds * Big build projects | **Working scientifically** |
| Upper Key Stage 2 | Year 5 | Material World | * Sorting and grouping materials * Solutions and mixtures | **Properties and changes of materials**  Compare materials  Dissolve, separating, reversible changes.  Change that produce new materials. | * planning enquiries, including recognising and controlling variables where necessary * taking measurements, using a range of scientific equipment, with increasing accuracy and precision * recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models * reporting findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions * presenting findings in written form, displays and other presentations * using test results to make predictions to set up further comparative and fair tests * using simple models to describe scientific ideas * identifying scientific evidence that has been used to support |
| Amazing Changes | * Getting a reaction * Real world reactions | **Properties and changes of materials**  Reversible and irreversible changes |
| Out of this World | * Our Solar System * Meet the scientists – Copernicus and Galileo * Day and Night | **Earth and Space**  Movement Earth, planets & moon.  Night and day |
| Let's Get Moving | * Forces of nature * Friction * What are simple machines? | **Forces**  Gravity, air/water resistance, friction.  Levers, pulleys and gears |
| Growing Up and Growing Old | * From baby to old age * Growing up * Growing old | **Animals including humans**  Human development, growth and puberty  How humans change with age |
| Circle of Life | * Making new plants * Animal life cycles * Making babies | **All living things and their habitats**  Life cycles of mammals, amphibians, fish and birds.  Reproduction in plants and animals |
| Year 6 | Classifying living things | * Classifying animals and plants * Classification kingdoms | **Living things and their habitats**  Classifications including microorganisms, plants and animals. |
| Healthy bodies | * Circulatory system * Exercise * Diet and lifestyle | **Animals, including humans**  Human circulatory system.  Exercise, drugs and lifestyle.  How are nutrients and water transported in plants and animals |
| Evolution and inheritance | * What can fossils tell us? * Inheritance and adaptation * Evolution | **Evolution and inheritance**  Fossils  Offspring different to parents  Animal adaptation—Evolution |
| Light | * Shadows * Reflection * Bending light | **Light**  Travels in straight lines  How light enables us to see  How shadows are formed - shape |
| Electricity | * Think like an electrician * Changing circuits * Build your own | **Electricity**  Brightness of lamp, volume of buzzer  Symbols and circuit diagrams. |
| The Titanic | * Keeping it afloat * Sinking the unsinkable * Staying alive | **Working scientifically** |